

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-199
Relating to Exemptions Under Section 27156
of the Vehicle Code

CARBONFLO SALES AMERICA, LTD.
"CARBONFLO" DEVICE

WHEREAS, Vehicle Code (VC) Section 27156 and Title 13 California Code of Regulations (hereafter "CCR") Section 2222(e), authorize the California Air Resources Board (ARB) and its Executive Officer to exempt add-on and modified parts from the prohibitions of VC Section 27156.

WHEREAS, Carbonflo Sales America, Ltd. has applied to the ARB for exemption from the prohibitions of VC Section 27156 for the "Carbonflo" device.

WHEREAS, pursuant to the authority vested in the Executive Officer by Health and Safety Code Section 39515 and in the Chief, Mobile Source Division by Health and Safety Code Section 39516 and Executive Order G-45-5, the ARB finds:

1. The "Carbonflo" device is an add-on device that is inserted in the fuel delivery line of a motor vehicle. Installations are exclusively done by authorized representatives of Carbonflo Sales America, Ltd.
2. The "Carbonflo" device is a cylindrical cartridge containing 22mm metallic "cones". Cartridges are available in 6 1/2, 7 1/2, 8 1/2, 9 1/2, and 10 1/2 inch lengths. The length of the cartridge used depends on the type of vehicle and its condition. This applicability will be determined by authorized representatives of Carbonflo Sales America, Ltd.
3. The "Carbonflo" device, being a fuel line insert, alters the original design of a motor vehicle pollution control system.
4. The "Carbonflo" device is a device subject to the prohibitions of VC Section 27156 and an add-on part as defined by 13 CCR Section 1900(b)(1).
5. The "Carbonflo" device does not reduce the effectiveness of any required motor vehicle pollution control device.
6. The ARB, in the exercise of technical judgment, is aware of no basis on which the "Carbonflo" device will provide an increase in fuel economy.
7. It has not been determined what effect use of the "Carbonflo" device may have on any warranty, either expressed or implied, by the manufacturer of a motor vehicle on which the device is installed.
8. The "Carbonflo" device is not a certified motor vehicle pollution control device pursuant to Health and Safety Code Section 43644.

9. The ARB by granting an exemption to Carbonflo Sales America, Ltd. for the "Carbonflo" device does not recommend or endorse in any way the "Carbonflo" device for emissions reduction, fuel economy, or any other purpose.

IT IS HEREBY RESOLVED that the "Carbonflo" device is exempt from the prohibitions of VC Section 27156 for installation on 1990 and older model year gasoline and diesel powered vehicles subject to the following conditions:

1. This exemption shall not apply to any device, apparatus, or mechanism advertised, offered for sale or sold with, or installed on, a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.
2. No changes are permitted to the device as described in the application for exemption. Any changes to the device, applicable model year, or other factors addressed in this order must be evaluated and approved by the ARB prior to marketing in California.
3. Marketing of this device using an identification other than that shown in this Executive Order or marketing of this device for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the ARB. Exemption of this product shall not be construed as an exemption to sell, offer for sale, or advertise any component of the product as an individual device.
4. Any oral or written references to this Executive Order or its content by Carbonflo Sales America, Ltd., its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that the Executive Order or the exemption it provides is not an endorsement or approval of any fuel economy or emissions reduction claims for the "Carbonflo" device and is only a finding that the device is exempt from the prohibitions of VC Section 27156.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after ten day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination after hearing that grounds for revocation exist.

Executed at El Monte, California, this 14th day of March, 1990.


K. D. Drachand, Chief
Mobile Source Division

State of California
AIR RESOURCES BOARD

EVALUATION OF CARBONFLO SALES AMERICA, LTD.'S "CARBONFLO" DEVICE
FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156
IN ACCORDANCE WITH SECTION 2222, TITLE 13,
OF THE CALIFORNIA CODE OF REGULATIONS

March 1990

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FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156
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OF THE CALIFORNIA CODE OF REGULATIONS

by

Mobile Source Division

State of California
Air Resources Board
9528 Telstar Avenue
El Monte, CA 91731

(This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.)

SUMMARY

Carbonflo Sales America, Ltd. of P.O. Box 91237 Henderson, Nevada 89009, has applied for exemption from the prohibitions in Section 27156 of the California Vehicle Code for their "Carbonflo" device. The device is designed for installation on 1990 and older model year gasoline and diesel powered vehicles.

Previously the Air Resources Board (ARB) exempted four similar devices: the "Moleculator Fuel Energizer" and the "Fuel Dominator" by Internal Energy Management Corporation, the "Top Eliminator" by Top Eliminator, Inc., and the "Fuel-Cat" by Fuel-Cat, Inc. Based on the engineering evaluation of the devices and exemptions issued for the devices that operate in a manner similar to the Carbonflo device, the staff concludes that the Carbonflo device will not have any adverse effects on the exhaust emissions from gasoline and diesel powered vehicles.

The staff recommends that the Carbonflo device be exempted from the prohibitions in Vehicle Code Section 27156 and that Executive Order D-199 be issued.

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OF THE CALIFORNIA CODE OF REGULATIONS

I. INTRODUCTION

Carbonflo Sales America, Ltd. of P.O. Box 91237 Henderson, Nevada 89009, has applied for exemption from the prohibitions in Section 27156 of the California Vehicle Code for their "Carbonflo" device. The device is designed for installation on 1990 and older model year gasoline and diesel powered vehicles.

The applicant submitted drawings, specifications, and testimonials of the device for our evaluation.

II. CONCLUSION

Previously, the Air Resources Board (ARB) exempted four similar devices: the "Molecular Fuel Energizer" and the "Fuel Dominator" by Internal Energy Management Corporation, the "Top Eliminator" by Top Eliminator, Inc., and the "Fuel-Cat" by Fuel-Cat, Inc. Based on the engineering evaluation of the devices and the exemptions issued to the devices that operate in a manner similar to the Carbonflo device, the staff concludes that the Carbonflo device will not have any adverse effects on the exhaust emissions from gasoline and diesel powered vehicles.

III. RECOMMENDATION

The staff recommends that Carbonflo Sales America, Ltd. be granted an exemption from the prohibitions in California Vehicle Code Section 27156 for their Carbonflo device and that Executive Order D-199 be issued.

IV. DEVICE DESCRIPTION AND OPERATION

The Carbonflo device is a cylindrical shaped cartridge containing

22mm metallic "cones". The cones are comprised of tin, antimony, mercury and lead. The mercury and lead are used to hold the "cones" together and are not released into the vehicle fuel system. Cartridges are available in 6 1/2, 7 1/2, 8 1/2, 9 1/2, and 10 1/2 inch lengths. The length of the cartridge used depends on the type of vehicle and its condition. This applicability will be determined by authorized representatives of Carbonflo Sales America, Ltd. The Carbonflo installation instructions and drawings are shown in Appendices A and B, respectively. Installation of the Carbonflo device will be exclusively done by authorized representatives of Carbonflo Sales America, Ltd.

The device is installed in series with the vehicle fuel line. According to the applicant when fuel passes through the device, molecular amounts of tin and antimony from the "cones" are released into the fuel stream. This promotes a faster chemical reaction between carbon atoms and oxygen atoms resulting in a more complete combustion. Because the fuel is used more efficiently, the applicant claims better fuel economy is obtained. The applicant also claims that this process aids in lubrication of the engine for better performance. The ARB did not perform any testing on the device to verify such claims. It is the staff's opinion that the technical principles underlying the stated function of the device are not capable of producing any effects on emissions, fuel economy or vehicle performance.

V. DISCUSSION

Previously the ARB exempted four similar devices: the "Moleculator Fuel Energizer" and the "Fuel Dominator" by Internal Energy Management Corporation, the "Top Eliminator" by Top Eliminator, Inc., and the "Fuel-Cat" by Fuel-Cat, Inc. These devices were issued exemptions based on back-

to-back CVS testing, fuel economy testing and engineering evaluation.

Because of the previous exemptions issued to similar devices with the same operating principle and the fact that in order to qualify for an exemption the device must not cause an increase in exhaust emissions, the staff recommends that Carbonflo Sales America, Ltd. be granted an exemption as requested.

APPENDICES

APPENDIX A

CARBONFLO SALES AMERICA, LTD,
P.O. BOX 91237
HENDERSON, NEVADA 89009
(702)565-1126

CARBONFLO CARTRIDGE INSTALLATION INSTRUCTIONS

The Carbonflo cartridge is designed to be installed in the fuel delivery line of the vehicle. The exact location may be anywhere between the gas tank and the carburetor or injection port. Before beginning your installation, it is suggested that you make a visual check of the entire fuel line system to determine the most efficient location for the cartridge and also establish the correct size (diameter) of the fuel line and the manufacturers stated pressure of the line in the case of fuel injected engines.

1. The cartridge may be installed in any position, however, a level or (plumbed in line) position is preferred.

2. It is further recommended that the cartridge be positioned behind the factory installed fuel filter. If a location in front of the fuel filter is selected, a second filter may be installed behind the cartridge if the vehicle owner so desires.

3. Having determined the location desired, insert the appropriate fittings into each end of the cartridge (ribbed, compression, or flared) and tighten fitting sufficient for a leak proof joint. Measure the **overall** length of the cartridge and then measure, cut and remove the appropriate length of fuel line.

4. Secure each end of the cartridge fittings to the fuel line again assuring a leak proof joint on each end. Note: check to see that the **Carbonflo** decal on one side of the cartridge is clearly visible for inspection after installation has been completed.

5. Attach the cartridge to the surface selected using two each standard 1" diameter pipe clamps or auto industry approved mounting devices as required.

6. Start the vehicle and allow the engine to run long enough to determine, by a visual check of the cartridge connections, that no leaks are observed.

CAUTIONS:

Do not mount cartridge near exhaust system or in close proximity of the catalytic converter.

Do not mount the cartridge in a location where it may be damaged by road hazards (rocks, sticks, "chuck holes", etc.)

Do not allow the fuel line only to support the cartridge after installation.

CARBONFLO - MORE POWER - LESS FUEL

Carbonflo Sales America, Ltd.
P.O. Box 91237
Henderson, Nevada 89009
(702) 565-1126

January 29, 1990

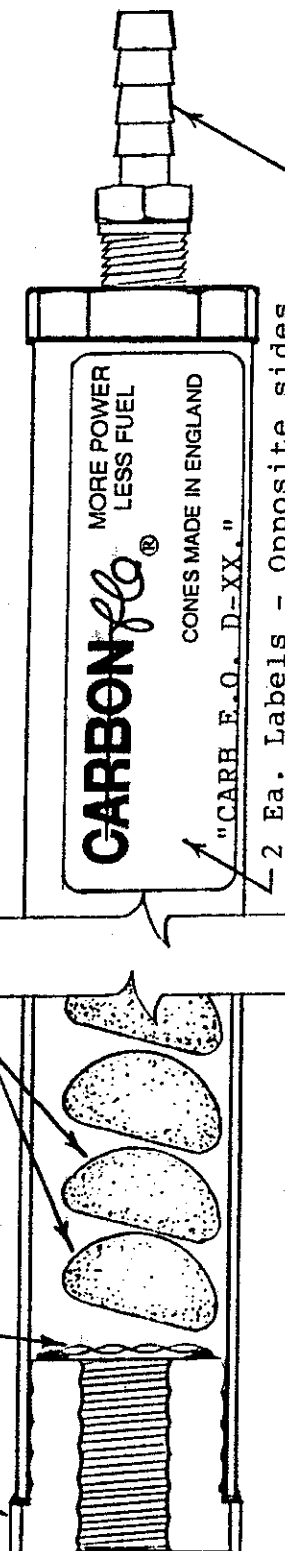
Carbonflo cartridge drawing

Drawing Scale = Actual Size

1" male X $\frac{1}{4}$ " female steel bushing epoxy or welded in place

Wire screen attached with epoxy

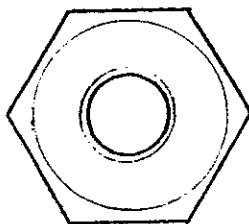
CARBONFLO Cones



2 Ea. Labels - Opposite sides

Brass fitting - Size as required

Use of flared, compression, or ribbed fitting as desired.



APPENDIX B

NOTES:

1. Exterior surfaces of cartridge shall be primed and painted. (Exterior industrial grade paint)
2. Length of cartridge, excluding fittings, shall determine number of cones as follows:
 $6\frac{1}{2}$ " long cartridge (as shown) contains 8 cones. - ~~4~~
 $7\frac{1}{2}$ " = 10 cones - ~~6~~
 $8\frac{1}{2}$ " = 12 cones
 $9\frac{1}{2}$ " = 14 cones
 $10\frac{1}{2}$ " = 16 cones

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-200-9
Relating to Exemptions Under Section 27156
of the Vehicle Code

DOUG THORLEY HEADERS, INC.
EXHAUST HEADERS
(P/N'S 106Y, 106Y-S, 114Y, 114Y-S, 153 AND 153-S)

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-5;

IT IS ORDERED AND RESOLVED: That the installation of the Doug Thorley exhaust header part nos. 106Y, 106Y-S, 114Y, 114Y-S, 153 and 153-S manufactured by Doug Thorley Headers, Inc. of 1561 Commerce Street, Corona, CA 91720, has been found not to reduce the effectiveness of the applicable vehicle pollution control system and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for the following non-feedback vehicle applications:

Exhaust Header P/N 106Y (non-AIR) and P/N 106Y-S (AIR)
1975-1981 model-year Plymouth/Dodge van equipped with a 273-360 CID engine

Exhaust Header P/N 114Y (non-AIR) and P/N 114Y-S (AIR)
1975-1981 model-year Dodge Ramcharger, Dodge pickup and Plymouth Trail Duster equipped with a 273-360 CID engine

Exhaust Header P/N 153 (non-AIR) and P/N 153-S (AIR)
1975-1976 model-year Dodge Dart and Plymouth Valiant/Scamp equipped with a 273-360 CID engine
1976-1979 model-year Dodge Aspen/Diplomat and Plymouth Volare equipped with a 273-360 CID engine

This Executive Order is valid provided that installation instructions for these headers will not recommend tuning the vehicle to specifications different from those submitted by Doug Thorley Headers, Inc.

Changes made to the design or operating conditions of these exhaust headers, as exempt by the Air Resources Board, which adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

Marketing of these exhaust headers using any identification other than that shown in this Executive Order or marketing of these exhaust headers for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

Exemption of these exhaust headers shall not be construed as exemption to sell, offer for sale, or advertise any component of the kit as an individual device.

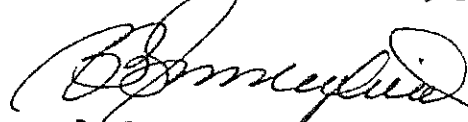
This Executive Order does not constitute any opinion as to the effect the use of these exhaust headers may have on any warranty either expressed or implied by the vehicle manufacturer.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF DOUG THORLEY HEADERS, INC.'S EXHAUST HEADER PART NOS. 106Y, 106Y-S, 114Y, 114Y-S, 153 AND 153-S.

No claim of any kind, such as "Approved by the Air Resources Board" may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after ten day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination after hearing that grounds for revocation exist.

Executed at El Monte, California, this 12th day of November, 1991.


R. B. Summerfield
Assistant Division Chief
Mobile Source Division